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A new species of *Spadicoides* from Yunnan, China

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Abstract — *Spadicoides yunnanensis* sp. nov., collected from tropical forests in Yunnan province of China, is described and illustrated from a specimen occurring on dead branches of *Camellia japonica*.

Key words — hyphomycetes, taxonomy

Introduction

The genus *Spadicoides* was established by Hughes (1958) with *S. bina* (Corda) S. Hughes as the type species. Sinclair et al. (1985) amended the generic description to include species with solitary conidia on branched or unbranched conidiophores and suggested that the production of conidia in chains is the sole diagnostic character separating *Diplococcium* Grove from *Spadicoides*. Goh & Hyde (1996) reviewed the genus *Spadicoides* and recognized 21 species in this genus. The genus is characterized by differentiated, single, unbranched or branched conidiophores with polytretic, terminal and intercalary conidiogenous cells producing solitary, terminal and lateral, euseptate, obovoid to ellipsoid conidia (Ellis 1971; Kuthubutheen & Nawawi 1991). Thus far, 30 species have been accepted in *Spadicoides*, of which four are described from China (Zhou et al. 1999; Ho et al. 2002; Wong et al. 2002; Cai et al. 2004).

Most species of *Spadicoides* are saprobes on rotten leaves or dead branches. A continuing survey of saprobic fungi on dead wood from tropical forest in Yunnan province of China revealed a previously undescribed species, *Spadicoides yunnanensis*. The type specimen is deposited in HSAUP (Herbarium of the Department of Plant Pathology, Shandong Agricultural University) with isotypes in HMAS (Mycological Herbarium, Institute of Microbiology, Chinese Academy of Sciences).

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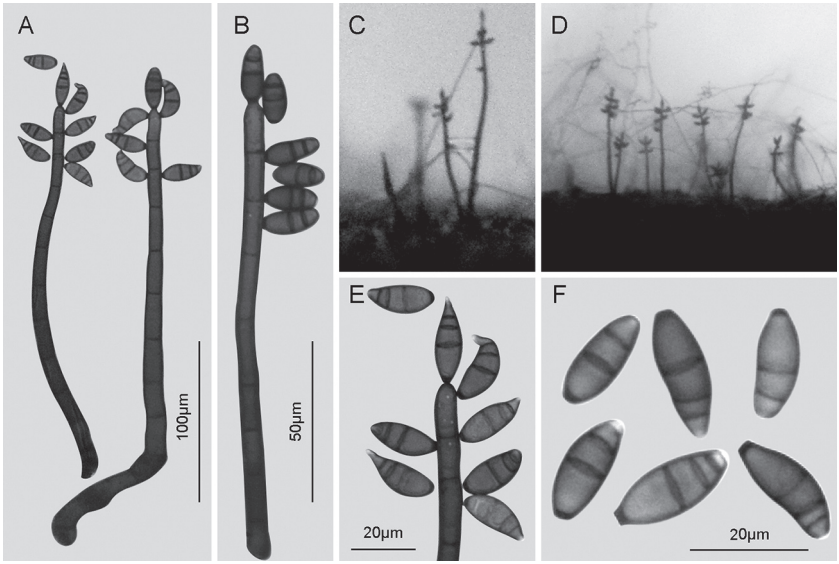

Fig. 1. *Spadicoides yunnanensis*. A–B. Conidiophores with terminal and lateral conidia. C–D. Conidiophores arising from wood. E. Conidiogenous cells showing conidiogenous pores. F. Conidia with 2–3 eusepta.

Taxonomic description

Spadicoides yunnanensis L.G. Ma & X.G. Zhang, **sp. nov.** Figure 1

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Coloniae effusae in substrato naturali, atro-brunneae. Mycelium partim superficiale, partim immersum, ex hyphis ramosis, septatis, pallide brunneis, laevibus, 1.5–2.0 μm crassis compositum. Conidiophora macronematosa, mononematosa, singula, simplicia, non ramosa, erecta, cylindrica, recta vel flexuosa, laevia, atro-brunnea, 7–12-septata, 140–290 μm longa, ad basim 10.0–14.5 μm crassa, ad apicem 6.5–8.0 μm crassa. Cellulae conidiogenae polytreticae, in conidiophoris incorporatae, terminales et intercalares, brunnea. Conidia solitaria, acropleurogena, simplicia, obpyriformia vel ovoidea, ad apicem rotundata vel acuta, ad basim truncata, brunnea, interdum cellulae apicalis subhyalina, laevia, crassitunicata, 2–3-euseptata, 18.5–28.0 μm longa, 6.5–10.0 μm crassa. Basi truncata 2.0–3.5 μm lata.

Holotype: on dead branches of *Camellia japonica* L. (*Theaceae*), the Forbidden Forest of Banna, Yunnan Province, China. Oct. 16. 2008, L.G. Ma, HSAUP H0041 (Isotype HMAS 196882).

Etymology: in reference to the province where the type was found

Colonies effuse on natural substratum, dark brown. Mycelium partly superficial, partly immersed, composed of branched, septate, pale brown, smooth-walled hyphae, 1.5–2.0 μm thick. Conidiophores macronematous, mononematous,

single, simple, unbranched, erect, cylindrical, straight or flexuous, smooth, dark brown, 7–12-septate, 140–290 µm long, 10.0–14.5µm wide at the base, 6.5–8.0 µm wide at the apex. Conidiogenous cells polytretic, integrated, terminal and intercalary, brown. Conidia solitary, acropleurogenous, simple, obpyriform to ovoid, apex rounded or acute, base truncate, brown, occasionally apical cell subhyaline, smooth-walled, thick-walled, 2–3-euseptate, 18.5–28.0 µm long, 6.5–10.0 µm wide in the broadest part, 2.0–3.5 µm wide at the truncate base.

The conidia of *S. yunnanensis* resemble those of *S. curvularioides* (Sutton 1978) and *S. xylogena* (Hughes 1958) in having a similar conidial size and number of septa. However, the conidia of *S. curvularioides* are verrucose, pale brown, and cymbiform compared to the smooth, brown, obpyriform to ovoid conidia of *S. yunnanensis*, and the apices of the conidiophores in *S. curvularioides* are geniculate as opposed to those of *S. yunnanensis*, which are not. In addition, *S. yunnanensis* can be separated from *S. xylogena* by its obpyriform to ovoid conidia without banded septa.

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